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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/413,444

Applicant(s)

ALBERT ET AL.

Examiner

Evelyn A. Lester

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-97 is/are pending in the application.
- 4a) Of the above claim(s) 41-91 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 92 and 94 is/are allowed.
- 6) ☐ Claim(s) 1-5, 7-10, 12-16, 18-34, 37-40, 93 and 95-97 is/are rejected.
- 7) ☒ Claim(s) 6, 11, 17, 35 and 36 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of 6-11-01 in Paper No. 8 is acknowledged.
2. Claims 41-91 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Information Disclosure Statement

3. Due to the extensive number of related U.S. patent applications listed in the IDS filed on 2-16-00, and the age of many of the applications, it is respectfully requested by the Examiner that the Applicants update the status of their related applications and provide those that are now issued patents to be listed on another PTO-1449. It should also be noted that any application files not available to the Examiner can not be considered, until such time a copy of the application be provided, especially those that are not yet published but are indicated as allowed.

Priority

4. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

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Drawings

5. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "initially associated with" in both claims 23 and 24 is considered confusing to the scope of the claims because it is unclear when this association occurs in this device claim, and whether or not the association must be maintained in order to meet the claim.

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Further, there is no indication how the layer of material is "initially associated with" the device of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

8. Claims 1-5, 7-10, 12-16, 22-26, 32, 33, 37-40, 93, and 95-97 rejected under 35 U.S.C. 102(e) as being anticipated by Albert et al (U. S. Patent 6,130,774).

Please especially note in Albert et al at Figures 4C and 5A-5C, as well as their accompanying text.

Albert et al discloses the claimed invention of an encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, wherein the capsules are substantially uniform size, wherein the capsules are substantially planar at least one side proximate the substrate, wherein the plurality of capsules are disposed on the substrate and are in association with a binder to form a film, and the film

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comprises closely packed capsules, and wherein at least a portion of the element has an optically active fraction of at least 70%.

Albert et al further discloses the claimed as described above as well as further comprising a layer of material substantially filling any interstices formed within the film, wherein the layer of material is substantially planar on a side opposite the film. wherein the capsules, the binder, and the layer of material comprise a stratum having a substantially uniform thickness, wherein the layer of material comprises the binder or the layer comprises an insulator, wherein the layer of material is either tacky or liquid at least at some point when substantially filling the interstices within the film, wherein the layer of material, the binder and the capsules comprise a stratum substantially free from voids (as noted especially at col. 14, line 51 to col. 15, line 27), and wherein Albert et al's invention further comprises a rear substrate disposed adjacent the layer of material (as noted in Figure 5A-5C and at column 1, lines 16-30).

Albert et al also discloses, with respect to claims 23 and 24 as far as these claims are understood, the invention wherein the layer of material is initially associated with the film or the rear substrate (i.e. Figure 4C and its accompanying text).

Albert et al discloses the claimed invention as described above, as well as further comprising a rear substrate material selected from a group which includes glass, wherein comprises at least one electrode which is indium tin oxide, wherein the capsules comprise a polymer matrix having fluid containing cavities, wherein at least one of the capsules includes a suspending fluid and at least one species of particle or wherein at least one of the capsules

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includes at least two species of electrophoretic particles wherein an optical property of a first species of particle is different from a second species of particle (as noted for example at col. 7, lines 10+), and wherein the encapsulated electrophoretic element is situated in a display.

9. Claims 1-4, 8, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Gordon II, et al (U.S. patent 6,144,361).

Gordon II, et al discloses the claimed invention of an encapsulated electrophoretic element comprising a plurality of non-spherical capsules disposed substantially in a single layer on a substrate, wherein the capsules are substantially uniform size, wherein the capsules are substantially planar at least one side proximate the substrate, wherein the plurality of capsules are disposed on the substrate and are in association with a binder to form a film, wherein Gordon II, et al's invention further comprises a layer of material is substantially filling an interstices formed within the film, wherein the layer of material comprises a conductor, and wherein there is a rear substrate disposed adjacent the layer of material, all as depicted and described at least in relation to Gordon II, et al's Figure 1a and its accompanying text, as well as the summary of the invention beginning in column 3 at line 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 19-21, 27-31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al (U.S. patent 6,130,774).

With respect to claims 19-21, 31 and 34, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the claimed materials for the recited respective elements, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In the instant case, Albert et al discusses various materials which at imply that the chosen materials for the recited elements as claimed would have been at least obvious, as noted for example at column 7, line 65 to column 8, line 13; also at column 11, lines 60-63.

With respect to claims 27, 28 and 29, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a transistor on the rear substrate since it was known in the display art that transistors are a compact way to individually control and apply an electric potential to select areas of a display (as noted for example in Albert et al at col. 4, lines 39-40). Selecting the materials for the transistor would have been obvious to one of ordinary skill in the display art since it has been held to be within the general skill of a worker in

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the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claim 30, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize at least one diode on the rear substrate since it was known in the display art that incorporating a diode in an optical display is a compact way to provide an efficient light source, thereby providing flexibility in the display's use and environment.

Allowable Subject Matter

11. Claims 6, 11, 17, 35 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 92 and 94 are allowed.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not fairly suggest or teach the claimed invention as recited in the above indicated claims, including recitation to specific material ratios between the binder and particles, as well as the specific stratum thickness of about 10 microns to about 500 microns, or the layer of material thickness of less than or equal to 50 microns, and also the capsule wall thickness from about 0.2-10 microns.

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Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to E.A. Lester whose telephone number is (703) 308-4943. The examiner can normally be reached on Monday-Friday from about 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on (703) 308-4883. The fax number for Technology Center 2800 is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Evelyn A. Lester
Patent Examiner
AU 2873
August 26, 2001